

WHAT IS CLAIMED IS:

- Sub A1
- Q 709
- 09716013-11700
- Sub B1
- Sub A2
1. A system for managing electronics manufacturing data comprising:
 - a processor;
 - a data storage device operably connected to the processor, the data storage device storing manufacturing standardization data and a plurality of electronic manufacturing data sets, each of the plurality of electronic manufacturing data sets corresponding to a local manufacturing process; and
 - a difference editor executable on the processor to display differences between the at least one of the electronic manufacturing data sets and the manufacturing standardization data.
 2. The system of claim 1 wherein the data storage device includes a server for providing the manufacturing standardization data.
 3. The system as recited in claim 2 wherein the data storage device further includes a control system for providing a first of the plurality of electronic manufacturing data sets, the processor being located at the control system.
 4. The system as recited in claim 1 wherein the data storage device includes a central server for providing the manufacturing standardization data, a first control system for providing a first of the plurality of electronic manufacturing data sets, and a second control system for providing a first of the plurality of electronic manufacturing data sets
 5. A method for managing electronics manufacturing data, in which the data comprises first and second sets, wherein the first and second sets each comprise data structures stored in at least one computer-readable storage medium, that correspond to one another but that may differ in the specific data they comprise, the method comprising the steps of:

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6. The method according to claim 5 wherein the at least one storage medium comprises first and second servers, and wherein the first set of electronics manufacturing data is stored on the first server and the second set of electronics manufacturing data is stored on the second server.
7. The method according to claim 5 wherein the first and second sets of electronics manufacturing data each reside in a separate, respective database.
8. The method according to claim 5 wherein the first and second data structures are objects.
9. The method according to claim 5 wherein the observation of at least one difference is made on the basis of a graphical display.
10. The method according to claim 5 wherein the observation of at least one difference is made on the basis of a textual display.

11. A method for managing of electronics manufacturing data, in which the data comprises non-local data and local data, comprising the steps of:
- permitting non-local electronics manufacturing data to be modified by a first set of persons;
 - permitting local electronics manufacturing data to be modified by a second set of persons;

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~~permitting a comparison between local electronics manufacturing data wherein the first and second sets of persons are not identical.~~

12. The method as recited in claim 11 wherein the permitting the comparison step includes displaying differences between the local electronics manufacturing data and the non-local electronics manufacturing data.

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~~13. The method as recited in claim 12 wherein the displaying step includes displaying a graphical representation of an electronic component.~~

14. The method as recited in claim 12 wherein the displaying step includes highlighting the differences.

15. The method as recited in claim 12 wherein the displaying step includes displaying lead information of an electronic component.

16. The method as recited in claim 11 wherein the local electronics manufacturing data includes information regarding a length of electronic component leads.

17. The method as recited in claim 11 wherein the non-local electronics manufacturing data includes a specification for a length of electronic component leads.

18. A manufacturing system comprising:
a first assembly line having a first controller, the first controller containing a first set of manufacturing data related to a product manufactured by the first assembly line;
a server providing a second set of manufacturing data to the first controller; and
a display displaying differences between the first set of manufacturing data and the second set of manufacturing data.

19. The manufacturing system as recited in claim 18 wherein the second set of manufacturing data is a standardization specification for the product.

20. The manufacturing system as recited in claim 18 wherein the product is a printed circuit board.

21. The manufacturing system as recited in claim 18 wherein the display includes a first window for the first set of manufacturing data and a second window for the second set of manufacturing data.

22. The manufacturing system as recited in claim 18 wherein the first set of data includes information relating to a plurality of electric components.

23. A printed circuit board assembly line comprising:
 at least one placement machine for placing components on a printed circuit board;
 a controller connected to the placement machine; and
 a display connected to the controller for comparing a first set of information regarding the components and a second set of information regarding desired characteristics for the components.

24. The printed circuit board assembly line as recited in claim 23 further comprising a server connected to the display, the server providing the second set of information.

25. The printed circuit board assembly line as recited in claim 23 further comprising a quality control device for examining the components on the printed circuit board, the quality control device being connected to the controller and being controlled as a function of the first set of information.

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26. A method for displaying differences between a first set of electronics manufacturing data and a second set of electronics manufacturing data comprising the steps of:

displaying the first set of electronics manufacturing data on a section of a display, the first set of electronics manufacturing data including a list of components being used in an assembly line;

displaying the second set of electronics manufacturing data on an other section of the display, the second set of electronics manufacturing data including another list of component desired to be manufactured on the assembly line; and

displaying differences between the first and second set of electronics manufacturing data.

27. The method as recited in claim 26 wherein the differences are displayed through highlighting.

28. The method as recited in claim 26 wherein the assembly line is a printed circuit board assembly line.

29. A method for manufacturing a printed circuit board comprising the steps of:

conveying a printed circuit board;

placing at least one component on the printed circuit board using a

placement machine as a function of a first set of electronics manufacturing data;

transferring the first set of electronics manufacturing data to a display; and

comparing the first set of electronics manufacturing data with a second set of electronics manufacturing data.

30. A printed circuit board manufactured according to the method of claim 29.